

CLAIMS

1. A radio receiver including a radio receiver circuit that receives a radio signal in which a carrier is modulated using a transmission signal, a local oscillation circuit that oscillates a local oscillation signal, and a demodulation circuit that demodulates the transmission signal on the basis of the radio signal and the local oscillation signal, the radio receiver comprising:

an oscillation frequency control circuit that repeatedly sweeps an oscillation frequency of the local oscillation circuit without stopping over a frequency bandwidth that is equal to or more than the width of a frequency drift in a carrier frequency of a radio transmitter that transmits the radio signal or over a frequency bandwidth that is equal to or more than the width of a frequency drift in the oscillation frequency of the local oscillation circuit.

2. The radio receiver according to Claim 1, wherein the transmission signal is a digital data signal including an error correction code.

3. The radio receiver according to Claim 1 or 2, wherein the transmission signal is a digital data signal in which codes having identical content are repeated within a repetition period in which the oscillation frequency control circuit sweeps the oscillation frequency.

4. The radio receiver according to Claim 3, wherein the oscillation frequency control circuit linearly changes the oscillation frequency within the repetition period in which the oscillation frequency control circuit sweeps the oscillation frequency.

5. A radio transmitter including an oscillation circuit that oscillates a high-frequency signal functioning as a carrier, a modulation circuit that modulates the carrier using a transmission signal to produce a radio signal, and a radio transmitter circuit that transmits the radio signal, the radio transmitter comprising:

an oscillation frequency control circuit that repeatedly sweeps an

oscillation frequency of the oscillation circuit without stopping over a frequency bandwidth that is equal to or more than the width of a frequency drift in a local oscillation frequency of a radio receiver that receives the radio signal or over a frequency bandwidth that is equal to or more than the width of a frequency drift in the oscillation frequency of the oscillation circuit.

6. The radio transmitter according to Claim 5, wherein the transmission signal is a digital data signal including an error correction code.

7. The radio transmitter according to Claim 5 or 6, wherein the transmission signal is a digital data signal in which codes having identical content are repeated within a period in which the oscillation frequency control circuit repeatedly sweeps the oscillation frequency of the oscillation circuit.

8. The radio transmitter according to Claim 7, wherein the oscillation frequency control circuit linearly changes the oscillation frequency within the repetition period in which the oscillation frequency control circuit sweeps the oscillation frequency.